

STATE OF CONNECTICUT

CONNECTICUT SITING COUNCIL

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August 30, 2007

TO:

Parties and Intervenors

FROM:

S. Derek Phelps, Executive Director

RE:

DOCKET NO. 332 – Cellco Partnership d/b/a Verizon Wireless application for

a Certificate of Environmental Compatibility and Public Need for the

construction, maintenance and operation of a telecommunications facility located at 6 Mountain Road or 167 New Milford Turnpike, Washington, Connecticut.

As stated at the hearing in New Britain on July 10, 2007, after the Council issues its draft findings of fact, parties and intervenors may identify errors or inconsistencies between the Council's draft findings of fact and the record; however, no new information, evidence, argument, or reply briefs will be considered by the Council.

Parties and Intervenors may file written comments with the Connecticut Siting Council on the Draft Findings of Fact issued on this docket by September 14, 2007.

SDP/laf

Enclosure



Docket No. 332 Page 1 of 2

LIST OF PARTIES AND INTERVENORS $\underline{\text{SERVICE LIST}}$

	Status Holder	Representative
Status Granted	(name, address & phone number)	(name, address & phone number)
Status Granted Applicant	(name, address & phone number) Cellco Partnership d/b/a Verizon Wireless	in the second se
Party (granted on 5/1/07)	Town of Washington	Steven R. Smart, Esq. Riefberg, Smart, Donohue & NeJames, P.C. 9 Old Sugar Hollow Road Danbury, CT 06810 (203) 748-9259 (203) 796-7584 fax ssmart@rsdn.com
		The Honorable Richard C. Sears First Selectman Washington Town Hall P.O. Box 383, 2 Bryan Plaza Washington Depot, CT 06794 (860) 868-2259 (860) 868-3103 fax First.selectman@washingtonct.org
Intervenor (granted on 05/22/07)	New Cingular Wireless PCS, LLC d/b/a AT&T	Christopher B. Fisher, Esq. Cuddy & Feder LLP 445 Hamilton Avenue, 14 th Floor White Plains, NY 10601 (914) 761-1300 (914) 761-6405 fax cfisher@cuddyfeder.com

Date:

June 22, 2007

Docket No. 332 Page 2 of 2

LIST OF PARTIES AND INTERVENORS $\underline{\text{SERVICE LIST}}$

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Intervenor (granted 06/21/07)	Malina McNamara 76 Mygatt Road New Preston, CT 06777 (860) 868-7996 (860) 868-0203 fax Mmcnamara1955@charter.net	

DOCKET NO. 332 – Cellco Partnership d/b/a Verizon Wireless application for a Certificate of Environmental Compatibility and Public Need for the construction, maintenance and operation of a telecommunications facility located at 6 Mountain Road or 167 New Milford Turnpike, Washington, Connecticut.

Siting

Council

August 22, 2007

DRAFT Findings of Fact

Introduction

- 1. Cellco Partnership d/b/a Verizon Wireless (Verizon), in accordance with provisions of General Statutes §§ 16-50g through 16-50aa, applied to the Connecticut Siting Council (Council) on March 29, 2007 for the construction, operation, and maintenance of a wireless telecommunications facility at 6 Mountain Road or 167 New Milford Turnpike in Washington, Connecticut. (Verizon 1, pp. 1-2)
- 2. Verizon is a Delaware Partnership with an administrative office located at 99 East River Drive in East Hartford, CT. Verizon is licensed by the Federal Communication Commission (FCC) to operate wireless telecommunications services in the State of Connecticut. (Verizon 1, p. 4)
- 3. The parties in this proceeding are the applicant and the Town of Washington. Intervenors to the proceeding are New Cingular Wireless PCS, LLC (AT&T) and Ms. Malina McNamara, an abutter to the 167 New Milford Road site. (Transcript 1 06/21/07, 3:00 p.m. [Tr. 1], p. 6)
- 4. The purpose of the proposed facility is to provide wireless service to Routes 202 and 45 in the Marbledale and New Preston areas of Washington. (Verizon 1, p. 2; Verizon 8, Q. 3)
- 5. Pursuant to General Statutes § 16-50m, the Council, after giving due notice thereof, held a public hearing on June 21, 2007, beginning at 3:00 p.m. and continuing at 7:00 p.m. at the Bryan Memorial Town Hall, 2 Bryan Plaza, Washington, Connecticut. The public hearing was continued on July 10, 2007 at the office of the Connecticut Siting Council, 10 Franklin Square, New Britain, Connecticut. (Council's Hearing Notice dated May 17, 2007; Tr. 1, p. 3; Transcript 2 06/21/07, 7:00 p.m. [Tr. 2], p. 3; Transcript 3 07/10/07, 1:00 p.m. [Tr. 3])
- 6. The Council and its staff conducted an inspection of the proposed sites on June 21, 2007, beginning at 2:00 p.m. The applicant flew a four-foot diameter balloon from 7:45 a.m. to 4:30 p.m. at each site to simulate the heights of the proposed towers. A red balloon was flown to a height of 155 feet at the 6 Mountain Road site and a black balloon was flown to a height of 155 feet at the 167 New Milford Turnpike site. Favorable weather conditions were present during the morning hours. Windy condition prevailed during the afternoon, preventing the balloons from reaching the intended heights. (Council's Hearing Notice dated May 17, 2007; Tr. 3, pp. 53-54)
- 7. Notice of the application was provided to all abutting property owners by certified mail. Public notice of the application was published in the <u>Waterbury Republican-American</u> on March 26 and 27, 2007. (Verizon 1, pp. 5-6, Verizon 2)
- 8. A four-foot by six-foot sign describing the proposed project was installed on each respective property prior to the June 21 hearing. (Tr. 3, pp. 54-55)

9. Pursuant to CGS § 16-50l (b), Verizon provided notice to all federal, state and local officials and agencies listed therein. (Verizon 1, p. 5)

State Agency Comment

- 10. Pursuant to General Statutes § 16-50j (h), on May 14, 2007 and July 11, 2007, the following State agencies were solicited to submit written comments regarding the proposed facility: Department of Environmental Protection (DEP), Department of Public Health (DPH), Council on Environmental Quality (CEQ), Department of Public Utility Control (DPUC), Office of Policy and Management (OPM), Department of Economic and Community Development (DECD), and the Department of Transportation (DOT). (Record)
- 11. The Council received written responses from the DPH's Drinking Water Division on May 25, 2007 and the DOT's Bureau of Engineering and Highway Operations on June 7, 2007, both stating that they have no comment. (Record)
- 12. No response was received from the DEP, CEQ, DPUC, OPM, or DECD. (Record)

Municipal Consultation

- 13. Verizon met with the Richard Sears, the First Selectman of the Town of Washington, on January 19, 2007: (Verizon 1, p. 20)
- 14. Verizon attended a public information meeting presented by the Washington Zoning Commission on March 5, 2007. (Verizon 1, p. 20)
- 15. At the request of the Town, Verizon conducted a balloon fly of both sites on March 18, 2007. Notice of the balloon fly was mailed to all abutters and was posted on the Town's website. (Verizon 1, p. 20)
- 16. At the public hearings on June 21 and July 10, 2007, Mr. Sears stated the Town does not want a tower built in either location. If a tower were to be constructed, the Town prefers the 6 Mountain Road location since the site has greater conformity to the Town's zoning regulations. The Town also requests a slender monopole design with flush mounted antennas. The town objects to any platform design even if the platforms were concealed by a stealth monopine design. (Tr. 2, pp. 11-12; Tr. 3, pp. 63-65)

Public Need for Service

- 17. In 1996, the United States Congress recognized a nationwide need for high quality wireless telecommunications services, including cellular telephone service. Through the Federal Telecommunications Act of 1996, Congress seeks to promote competition, encourage technical innovations, and foster lower prices for telecommunications services. (Council Administrative Notice Item No. 7)
- 18. In issuing cellular licenses, the Federal government has preempted the determination of public need for cellular service by the states, and has established design standards to ensure technical integrity and nationwide compatibility among all systems. (Council Administrative Notice Item No. 7)
- 19. The Telecommunications Act of 1996 prohibits local and state entities from discriminating among providers of functionally equivalent services. (Council Administrative Notice Item No. 7)

20. The Telecommunications Act of 1996, a Federal law passed by the United States Congress, prohibits any state or local entity from regulating telecommunications towers on the basis of the environmental effects of radio frequency emissions to the extent that such towers and equipment comply with FCC's regulations concerning such emissions. This Act also blocks the Council from prohibiting or acting with the effect of prohibiting the provision of personal wireless service. (Council Administrative Notice Item No. 7)

Site Selection

- 21. Verizon established a half-mile wide search ring immediately north of Marbledale village. (Verizon 5, Attachment 3)
- 22. The nearest existing tower facility to the search ring is a 160-foot monopole located at 399 Chestnut Lane in New Milford (New Milford East), approximately 2.7 miles to the southeast. Verizon is located at the 140-foot level of this tower. This site does not provide adequate coverage to the Marbledale area. (Verizon 1, Attachment 7, Attachment 9; Verizon 8, Q. 2)
- 23. Verizon examined the steeple at the New Preston Congregational Church as a possible telecommunication site but rejected that location after determining the Town did not allow AT&T Wireless to locate there in 2004. (Verizon 1, Attachment 9)
- 24. At the Town's request, Verizon examined the possibility of locating on existing electric transmission structures near the junction of Route 202 and Route 45 in the New Preston section of Washington. The existing poles are 60 to 80 feet in height. Verizon modeled coverage from a height of 120 feet and determined coverage would not extend to the southwest along Route 202 due to area topography. (Exhibit 13; Tr. 1, pp. 62-63; Tr. 2, pp. 18, 26-27)
- 25. After determining there were no viable structures within the search area, Verizon searched for properties suitable for tower development. Verizon investigated six parcels and selected two for site development. The four rejected parcels and reasons for their rejection are as follows:
 - a) New Preston Fire Department Town is not interested in having a tower at this location.
 - b) Property off North Sawyer Hill Road owner decided not to pursue lease agreement.
 - c) Property off Sunset Lane site does not meet coverage objectives.
 - d) Property off Route 202 near Flirtation Avenue Verizon could not reach lease agreement with property owner.

(Verizon 1, Attachment 9)

Site Description - 6 Mountain Road

- 26. The proposed 6 Mountain Road (Site 1) facility is located on a 32.07-acre parcel owned by H. Ray and Carol A. Underwood. The parcel is west of Route 202 and is mostly undeveloped, although a single-family residence is located in the southwest portion. (Verizon 1, p. 2, Attachment 1)
- 27. The Site 1 parcel is zoned Farming and Residential, R-1. (Verizon 1, p. 18)
- 28. Access to Site 1 would extend over an abutting property at 16 Mountain Road. The 16 Mountain Road parcel is 5.34 acres and is developed with a single-family residence. (Verizon 1, p. 2; Attachment 1)

- 29. The tower site is located in the heavily wooded western portion of the 6 Mountain Road property at an elevation of 693 feet above mean sea level (amsl). It occupies a small level area adjacent to a steep sloping hillside. (Verizon 1, Attachment 1)
- 30. Verizon proposes to construct a 150-foot monopole designed as a pine tree at the site. The overall height of the tower with simulated branches would be 157 feet above ground level (agl). It would be designed to support four levels of antennas with a 10-foot center-to-center vertical separation. The tower would be constructed in accordance with the American National Standards Institute TIA/EIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures". (Verizon 1, p. 2, Attachment 1; Tr. 3, pp. 88-89)
- 31. Verizon proposes to install 12 panel antennas on a platform at a centerline height of 150 feet agl, extending 14 feet off the tower. AT&T would mount six antennas on a platform at a centerline height of 140 feet agl. (Verizon 1, Attachment 1; Tr. 3, pp. 51-52; AT&T 1, Q. 2)
- 32. Verizon proposes to construct a 55-foot by 65-foot equipment compound within an 80-foot by 120-foot lease area at the base of the tower. An eight-foot high chain link fence topped with barbed wire would enclose the compound. Within the compound, Verizon proposes to install a 12-foot by 30-foot equipment shelter and AT&T proposes to install a 12-foot by 20-foot equipment shelter. (Verizon 1, p. 2, Attachment 1; AT&T 1, Q. 8)
- 33. Access to the site would be provided by a 12-foot wide, 1,065-foot long access drive originating from an existing driveway on the 16 Mountain Road property. The access drive would follow an existing gravel road that crosses onto the 6 Mountain Road property, then turns north from the existing road, and goes up a slope to the compound site. Underground utilities would be installed along the access road to the compound. (Verizon 1, Attachment 1)
- 34. The nearest abutting property from the tower site is approximately 220 feet to the east, owned by Beatrice Tollman. (Verizon 1, Attachment 1)
- 35. The nearest residence to the proposed tower site is approximately 840 feet to the south, on property owned by the lessor. There are no other residences within 1,000 feet of the site. The nearest residence to the tower site on property not owned by the lessor is 1,265 feet to the southwest at 17 Pleasant Drive (Brennan Property). (Verizon 1, Attachment 1; Verizon 9, Q. 9)
- 36. Land within a quarter-mile of the site is predominately low density residential, commercial, agricultural, or undeveloped. (Verizon 1, Attachment 1)
- 37. The estimated cost of construction for the Site 1 facility is:

Cell site radio equipment	450,000.
Tower, coax, and antenna	200,000.
Utilities	20,000.
Equipment building	50,000.
Site preparation, facility installation	<u>130,000</u> .

Total estimated cost \$850,000.

(Verizon 1, p. 22)

Site Description – 167 New Milford Turnpike

- 38. The proposed 167 New Milford Turnpike facility (Site 2) is located on a 1.25-acre parcel owned by Unice and Lloyd Waldron. The parcel, developed with a single-family residence, abuts the east side of Route 202. (Verizon 1, Attachment 2)
- 39. The Site 2 parcel is zoned business, B-3. (Verizon 1, p. 18)
- 40. The tower site is located in the rear portion of the parcel at an elevation of 643 feet amsl. (Verizon 1, Attachment 2)
- 41. Verizon proposes to construct a 150-foot monopole designed as a pine tree at the site. The overall height of the tower with simulated branches would be 157 feet agl. The tower would be designed to support four levels of antennas with a 10-foot center-to-center vertical separation. The tower would be constructed in accordance with the American National Standards Institute TIA/EIA-222-G "Structural Standards for Steel Antenna Towers and Antenna Support Structures". (Verizon 1, p. 2, Attachment 2; Tr. 3, pp. 88-89)
- 42. Verizon proposes to 12 panel antennas on a platform at a centerline height of 150 feet agl. The platform would extend 14 feet off the tower. AT&T would mount six antennas on a platform at a centerline height of 140 feet agl. (Verizon 1, Attachment 2; Tr. 3, pp. 51-52; AT&T 1, Q. 2)
- 43. Verizon proposes to construct a 48-foot by 75-foot equipment compound within a 60-foot by 95-foot lease area. Due to the 15% grade on the property, the compound would be designed with two tiers at different elevations. The lower tier would be surrounded by a concrete retaining wall. (Verizon 1, Attachment 2)
- 44. Within the compound, Verizon proposes to install a 12-foot by 30-foot equipment shelter and AT&T proposes to install a 12-foot by 20-foot equipment shelter. An eight-foot high chain link fence topped with barbed wire would enclose the compound. (Verizon 1, Attachment 2; AT&T 1, Q. 8)
- 45. Verizon proposes to construct a new 12-foot wide, 350-foot long gravel access road from the existing driveway entrance on the property. The access drive would require the construction of a concrete retaining wall adjacent to the compound turnaround area. (Verizon 1, Attachment 2)
- 46. The nearest property from the tower site is approximately 25 feet to the north (Gill & Hardy Property). The tower radius would extend onto this property by 132 feet. No structures are located within the tower radius. (Verizon 1, Attachment 2; Tr. 1, pp. 84-86)
- 47. There are 18 residences within 1,000 feet of the site. The nearest residence is approximately 248 feet west of the tower site (Meissner Property). Ms. McNamara's property abuts the site to the south. Ms. McNamara's residence is approximately 298 feet south of the tower site. (Verizon 1, Attachment 2; Tr. 1, p. 97)

48. The estimated cost of construction of Site 2 facility is:

Cell site radio equipment	450,000.	
Tower, coax, and antenna	200,000.	
Utilities	20,000.	
Equipment building	50,000.	
Site preparation, facility installation	_80,000.	
Total estimated cost (Verizon 1, p. 22)	\$800,000.	

Environmental Concerns

- 49. The proposed facilities would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. The New Preston Hill Historic District, approximately 0.75 miles northwest of the site, would not be affected by the Site 2 facility. (Verizon 1, Attachment 10, Attachment 11)
- 50. The residence at the Site 2 property is not historically or architecturally significant and is not eligible for the National Register. (Verizon 1, Attachment 11)
- 51. The proposed sites contain no known existing populations of Federal or State Endangered, Threatened or Special Concern Species. (Verizon 1, Attachment 11)
- 52. Construction of the Site 1 facility would require the removal of 24 trees in and around the lease area. (Verizon 1, Attachment 1; Verizon 4, Q. 4)
- 53. Construction of the Site 2 facility would not require the removal of any trees. (Verizon 4, Q. 4)
- 54. No wetlands or watercourses would be impacted by construction of the proposed sites. A manmade pond is approximately 440 feet south of Site 1. A drainage ditch is approximately 100 feet south of Site 2. (Verizon 1, p. 19, Attachment 12)
- 55. Aircraft hazard obstruction marking or lighting would not be required for either site. (Verizon 1, p. 20, Attachment 13)
- 56. The cumulative maximum power density from the radio frequency emissions of the proposed Verizon and AT&T antennas is calculated to be 7.9 % of the standard for Maximum Permissible Exposure, as adopted by the FCC, at the base of either proposed tower. This calculation was based on methodology prescribed by the FCC Office of Engineering and Technology Bulletin No. 65E, Edition 97-01 (August 1997) that assumes all antennas would be pointed at the base of the tower and all channels would be operating simultaneously. (Verizon 1, p. 16, AT&T 1, Q. 9)
- 57. Assuming all of the carriers licensed to serve Litchfield County located on the tower, the cumulative maximum power density at the base of the tower, the nearest uncontrolled access area, would be 37.67 % of the standard for Maximum Permissible Exposure, as adopted by the FCC. (Verizon 12; Tr. 1, pp. 35-40; Tr. 3, pp. 89-90)

Visibility

- 58. The tree canopy height used in the visibility analysis is 65 feet agl. (Verizon 1, Attachment 10)
- 59. The Site 1 tower would be visible year-round above the tree canopy from approximately 48-acres within a two mile radius of the site (refer to Figure 2). The tower would be seasonally visible from an additional 13 acres. (Verizon 1, Attachment 10)
- 60. The Site 2 tower would be visible year-round above the tree canopy from approximately 36-acres within a two mile radius of the site (refer to Figure 3). The tower would also be seasonally visible from an additional 12 acres. (Verizon 1, Attachment 10)
- 61. The tree canopy height immediately surrounding the Site 1 area is approximately 60-80 feet. The simulated branches would be installed on the tower from seven feet above the 150-foot monopole descending to a height of approximately 60 feet agl. (Verizon 1, Attachment 10; Tr. 3, p. 36)
- 62. The tree canopy height immediately surrounding the Site 2 area is approximately 30 feet. The simulated branches would be installed on the tower from seven feet above the 150-foot monopole descending to a height of approximately 30 feet agl. (Verizon 1, Attachment 10; Tr. 3, p. 36)
- 63. The diameter of the tree tower, including simulated branches, would taper from 40 feet at the lowest point of installation of the simulated branches to 15 feet at the uppermost antenna platform (150 feet agl). (Tr. 3, pp. 50-51)
- 64. The Site 1 location is in a more forested setting and has more surrounding vegetative screening than Site 2. (Tr. 3, pp. 35-36)
- 65. The Site 1 tower would be visible year-round from 23 residential properties, including 12 units within the Quarry Ridge Condominium complex. No residences within a quarter mile of the site would have a view of the tower. (Verizon 1, Attachment 10; Verizon 9, Q. 15)
- 66. The Site 2 tower would be visible year-round from five residential properties, including three properties within a quarter mile of the site, one of which is Ms. McNamara's property. (Verizon 1, Attachment 10; Verizon 9, Q. 15; McNamara 7)

67. Visibility of the Site 1 tower from specific locations within a two-mile radius of the site is as follows:

Location	Visible	Approximate Portion of Tower Visible	Distance from Tower
Route 202 at Mygatt Road	Yes	60 feet - unobstructed with hillside as a backdrop.	0.4 mile east
Routé 202 east of site	Yes	85 feet – unobstructed. Length of road visibility is 0.4 mile.	0.2 mile east
Mygatt Road, adjacent to #60	Yes	60 feet – unobstructed with hillside as a backdrop. Length of road visibility is 0.4 mile.	0.3 mile east
Quarry Ridge Condominiums off Mygatt Road	Yes	40 feet – unobstructed.	0.3 mile south
Scoffield Hill Road, adjacent to #47	Yes	75 feet – unobstructed with hillside as a backdrop. Length of road visibility is 0.2 mile.	0.6 mile southeast
Baldwin Hill Road	Yes	30 feet - unobstructed with hillside as a backdrop. Length of road visibility is >0.1 mile.	0.8 mile northeast
Preston Hill Road adjacent to #38	Yes	85 feet – unobstructed. Length of road visibility is 0.1 mile.	0.6 mile northeast
Wheaton Road (scenic road)	Yes	30 feet – through trees with hillside as a backdrop. Length of road visibility >0.1 mile.	0.6 mile south

(Verizon 1, Attachment 10)

68. Visibility of the Site 2 tower from specific locations within a two-mile radius of the site is as follows:

Location	Visible	Approximate Portion of Tower Visible	Distance from Tower
Route 202 at Mygatt Road	Yes	120 feet – through sparse vegetation.	0.05 miles south
Property at 169 New Milford Turnpike	Yes	110 feet – unobstructed.	0.05 miles south
Route 202 southwest of site	Yes	100 feet – unobstructed. Length of road visibility is 0.4 mile.	0.1 miles southwest
Route 202 immediately northwest of site	Yes	150 feet – unobstructed.	0.05 miles northwest
Baldwin Hill Road	Yes	70 feet – unobstructed. Length of road visibility is 0.1 mile.	0.4 miles northeast
Main Street (New Preston)	Yes	20 feet – through sparse vegetation. Length of road visibility is 0.1 mile.	0.4 miles north
Main Street (New Preston) at Route 202	Yes	50 feet – unobstructed. Length of road visibility on Route 202 is 0.1 mile.	0.4 miles northeast
Christian Street North	Yes	60 feet – unobstructed. Length of road visibility is 0.1 mile.	0.3 miles northeast

(Verizon 1, Attachment 2, Attachment 10; Tr. 3, p. 35)

- 69. Both towers would be visible along a 0.4-mile section of Route 202 north of Marbledale. The predominant land use in this area is commercial, including two gas stations, restaurants, a nursery, and small offices. (Verizon 9, Q. 16)
- 70. The towers would not be visible from any hiking trails maintained by the DEP or the Connecticut Forest and Parks Association. Neither tower would be visible from Mount Bushnell State Park, located approximately one mile north of the sites. (Verizon 1, Attachment 10)

Verizon - Existing and Proposed Wireless Coverage

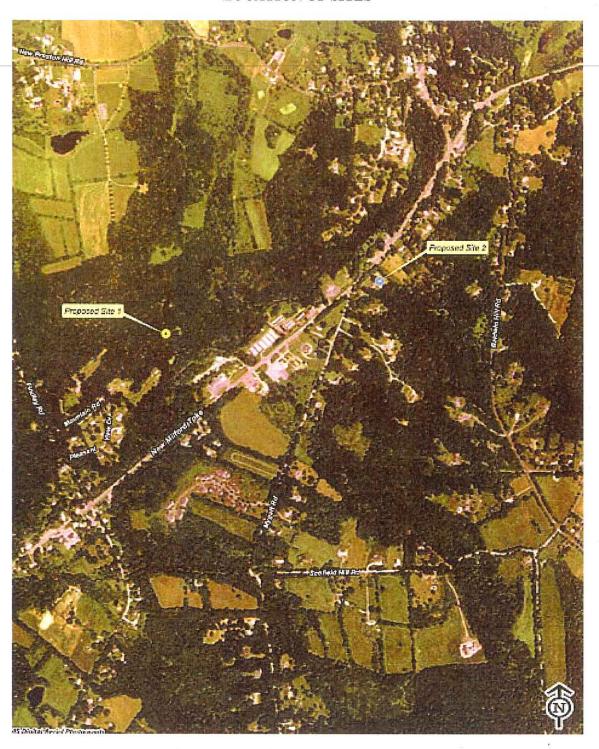
- 71. Verizon proposes to operate 1900 MHz equipment at this site. Verizon is designing the site for invehicle coverage, using a signal level threshold of -85 dBm for 99% reliability. (Verizon 1, p. 8; Verizon 5, Q. 5; Tr. 1, p. 34)
- 72. Verizon currently has no reliable, continuous coverage on Route 202 in the Washington area. Limited coverage from the New Milford East site extends along several high elevation areas above Route 202 in Marbledale, including the ridge where Site 1 is located. The coverage from this site does not reach Route 202. Verizon currently has a roaming agreement that provides limited service along Route 202 south of Marbledale. (Verizon 1, p. 2, Attachment 7; Verizon 9, Q. 12; Tr. 1, pp. 18-19; Tr. 3, pp. 68-69, 80)
- 73. Both proposed sites would provide approximately 3.5 miles of coverage along Route 202. Site 1 would provide a coverage footprint of 4.6 square miles (refer to Figure 4). Site 2 would provide a coverage footprint of 3.6 square miles (refer to Figure 6). (Verizon 1, pp. 10-11; Tr. 1, pp. 44-45)
- 74. The proposed site would be designed to provide continuous service to a future site located to the southwest along Route 202 in New Milford (New Milford NE). Potential sites for the New Milford NE site include a monopole proposed by Optasite (Docket 342) or a facility at the Northville Fire Department. (Verizon 5, Q. 2; Verizon 9, Q. 13, Q. 14)
- 75. Continuous service requires coverage from each interacting site to overlap by approximately 10%. For Site 1, there would be 14% overlapping coverage with the Northville Fire Department site and 25% overlapping coverage with the Docket 342 site. For Site 2, there would be 11% overlapping coverage with the Northville Fire Department site and 21% overlapping coverage with the Docket 342 site. (Tr. 1, p. 45; Tr. 3, pp. 52-53)
- 76. Reducing the antenna height at Site 1 to 140 feet would cause a degradation of coverage of 0.25 miles on Route 45 in New Preston village and of 0.25 miles on Route 202 northeast of the site (refer to Figure 5). Both areas of degradation are on the edge of the coverage footprint. Currently, there are no Verizon sites north of the coverage footprint, although Verizon does have two active search rings to serve Routes 45 and 202 in these areas. (Verizon 4, Q. 8; Tr. 3, pp. 29-30)
- 77. Reducing the antenna height at Site 1 to 130 feet would cause further degradation at the junction of Route 202 and Route 45 in New Preston and along Route 202 northeast of the site. At 130 feet, the site would provide continuous coverage with the proposed Docket 342 site but not with the potential Northville Fire Department site. (Verizon 4, Q. 8; Verizon 5, Q. 2; Verizon 9, Q. 14; Tr. 3, pp. 29-30)

- 78. Reducing the antenna height at Site 2 to 130 feet would cause degradation of coverage of 0.5 miles on Route 45 in New Preston and 0.2 miles on Route 202 northeast site (refer to Figure 7). Additionally, small gaps (>0.1 mile) would occur on Route 202 southeast of the site, resulting in non-continuous coverage with either the potential Northville Fire Department site or the proposed Docket 342 site. (Verizon 4, Q. 8; Verizon 5, Q. 2; Verizon 9, Q. 14)
- 79. Installing antennas on the monopole at a height of 150 feet agl in a three antenna, flush mount configuration would cause an overall degradation of the coverage footprint by 2 dB. The coverage loss would be similar to reducing the height of platform-mounted antennas by 10 feet. To achieve coverage objectives using flush mounted antennas, the antennas would need a height of 160 feet. (Tr. 1, p. 89; Tr. 3, pp. 31-32)

AT&T - Existing and Proposed Wireless Coverage

- 80. AT&T proposes to operate 850 MHz equipment at this site. AT&T's current design thresholds for this site are -75 dBm for in-building service, -82 dBm for in-vehicle service and -92 for on-street service. (AT&T 1, Q. 4)
- 81. AT&T's seeks to provide service on Route 202 and Route 45 in Washington. Currently, there is no usable signal along portions of Route 202 and Route 45 and surrounding areas east and north of the site. The existing signal west of the site is below -100 dBm, which is unacceptable for reliable service. (AT&T 1, Q. 1)
- 82. AT&T proposes to install antennas at a tower height of 140 feet agl (refer to Figures 8 & 9). AT&T's minimum height requirements to achieve coverage objectives are 110 feet agl at Site 1 and 120 feet agl at Site 2. (AT&T 1, Q. 7)
- 83. Installing flush mounted antennas would not affect AT&T's coverage objectives. (Tr. 3, p. 84)

FIGURE 1 LOCATION OF SITES



(Verizon 1, p. iiii)

FIGURE 2 VISIBILITY OF SITE 1

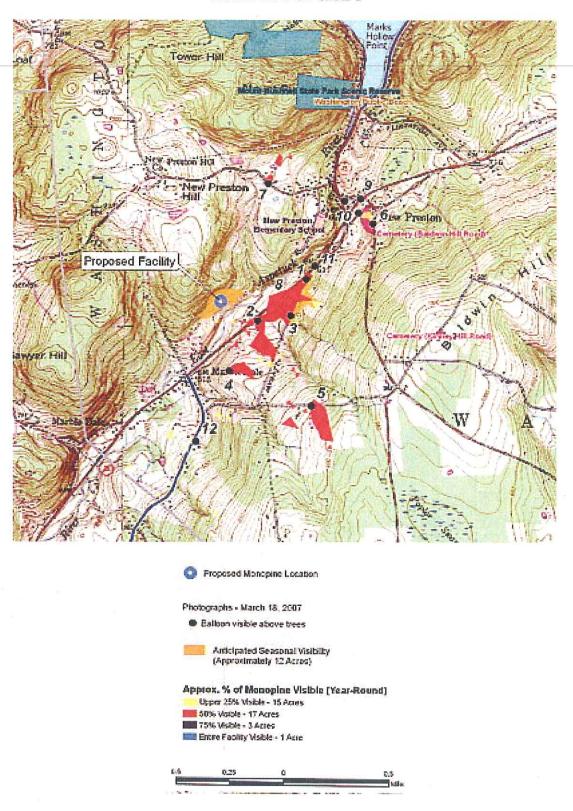
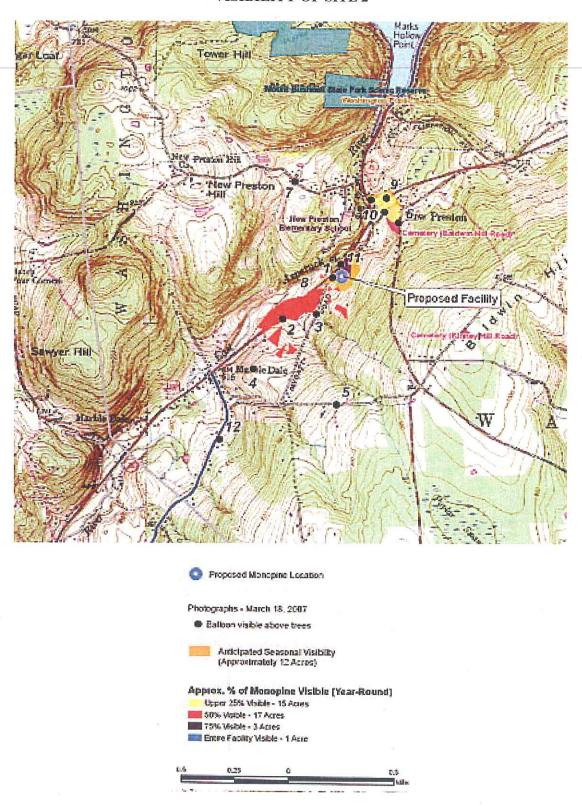


FIGURE 3 VISIBILITY OF SITE 2

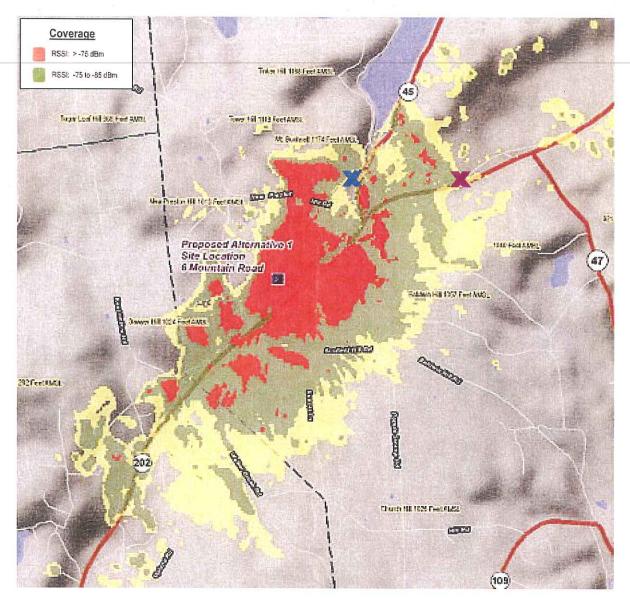


(Verizon 1, Attachment 10)

Coverage RSSI: > -75 dBm licker felt 1984 5-RSSI: -75 to -85 dBm Ougariant HI SCHE ALEQ COMMITTEE THE THE PARTY M. burred 154 For AMS Proposed Alternative C Site Location 6 Mountain Road RANGE HE 1057 FORCING Cowyer HE 10241 cer AMDE 1202 Feet AMO Charle Hill 1009 Feet ANS 2200 Liver Chara III 1656 Feet AMSU

FIGURE 4
VERIZON COVERAGE FROM SITE 1 AT 150 FEET

FIGURE 5 VERIZON COVERAGE FROM SITE 1 AT 140 FEET

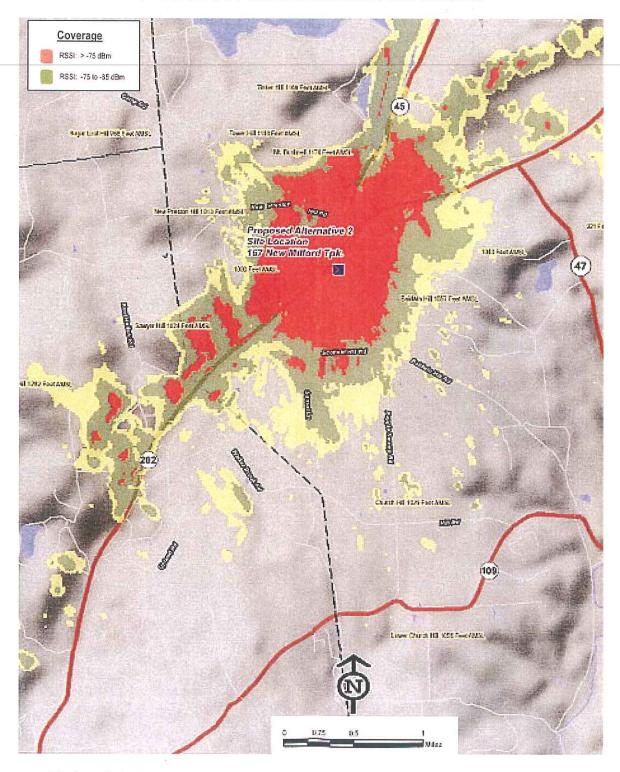


X Area on Route 202 where coverage would degrade by a quarter mile.

Area on Route 45 (New Preston Village) where coverage would degrade by a quarter mile.

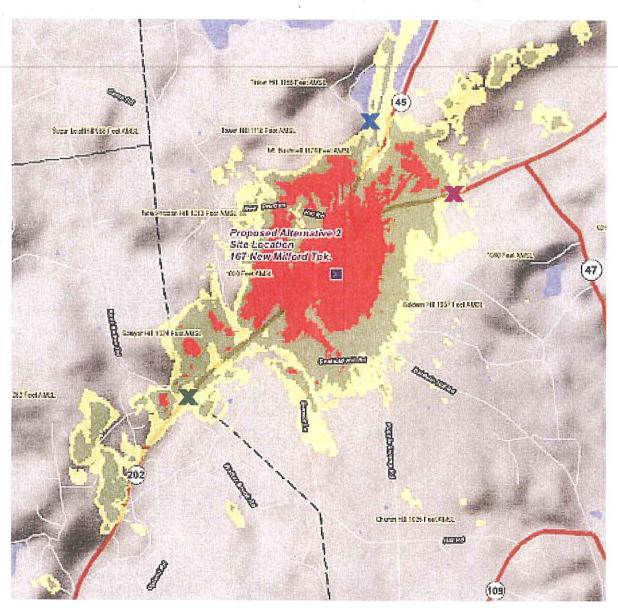
(Verizon 1, 4, Q. 8)

FIGURE 6 VERIZON COVERAGE FROM SITE 2 AT 150 FEET



(Verizon 4, Q. 8)

FIGURE 7
VERIZON COVERAGE FROM SITE 2 AT 130 FEET



- X Area on Route 202 where coverage would degrade by a 0.2 mile.
- X Area on Route 45 (New Preston Village) where coverage would degrade by a 0.5 mile.
- Area on Route 202 where small gaps in coverage would occur if either the Northville Fire Department site or the D 342 site were developed and utilized by Verizon.

(Verizon 4, Q. 8)

FIGURE 8 AT&T EXISTING COVERAGE

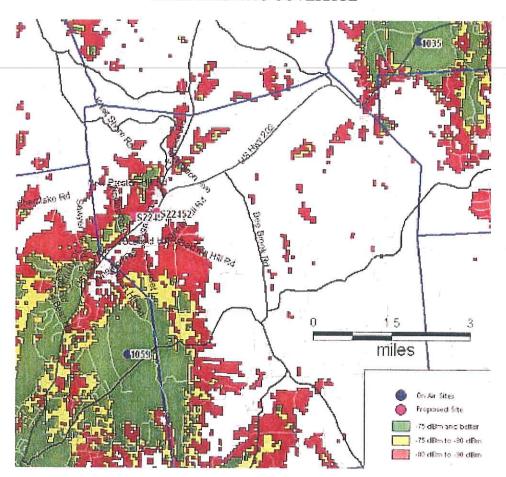


FIGURE 9
AT&T EXISTING COVERAGE AND PROPOSED COVERAGE FROM SITE 1

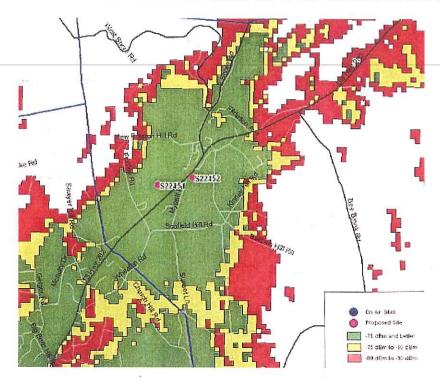
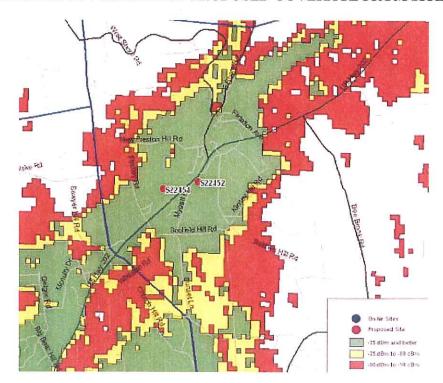


FIGURE 10
AT&T EXISTING COVERAGE AND PROPOSED COVERAGE FROM SITE 2



(AT&T 1, Q. 7)